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ON THE SPIDER GENUS *HEBRITHELE* (ARANEAE, MITURGIDAE)

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ABSTRACT. The genus *Hebrithele* has been known only from the female holotype of its type species, *Hebrithele longicauda* Berland. The male of the species was apparently described earlier but was misplaced in the family Gnaphosidae. *Hypodrassodes insulanus* (Rainbow) is transferred to the Miturgidae and considered a senior synonym of *Hebrithele longicauda*.

The spider genus *Hebrithele* was established by Berland (1938) on the basis of a single female from the New Hebrides. Berland considered the spider of ambiguous relationship, noting that the widely separated anterior lateral spinnerets suggested a placement in the Gnaphosidae, where the enlarged anterior median eyes suggested possible relationships to such genera as *Leptodrassus* Simon or *Anzacia* Dalmas. However, the presence of a long distal segment on the posterior lateral spinnerets made Berland hesitant to assign the genus to the Gnaphosidae, as gnaphosids do not share that feature. He therefore assigned the genus to the Clubionidae, suggesting a close relationship to such New World genera as *Eutichurus* Simon and *Strotarchus* Simon, both of which are currently assigned to the Miturgidae. *Hebrithele* was itself transferred to the Miturgidae by Lehtinen (1967), who did not assign the genus to any of the six miturgid subfamilies that he recognized (although he suggested a possible placement in the otherwise New World Eutichurinae).

During a recent visit to the B. P. Bishop Museum in Honolulu, the first author encountered, among Pacific spiders identified as gnaphosids, a male from the New Hebrides that seemed to belong to *Hebrithele*. A subsequent literature search indicated that this male was probably first described by Rainbow (1901) as the gnaphosid *Leptodrassus insulanus*. The holotype of that species, unfortunately, appears to be lost; it is not in the collection of the Australian Museum, Sydney, even though the remaining types from that paper are housed there (Dr. M. R. Gray, *in litt.*). Nevertheless, Rainbow's figure of the male palp is detailed enough to leave few doubts about its identity with the Bishop Museum specimen.

Rainbow's species was later transferred to the gnaphosid genus *Anzacia* Dalmas by Dalmas (1919). For unknown reasons, the species was transferred by Roewer (1955) to the gnaphosid genus *Hypodrassodes* Dalmas.

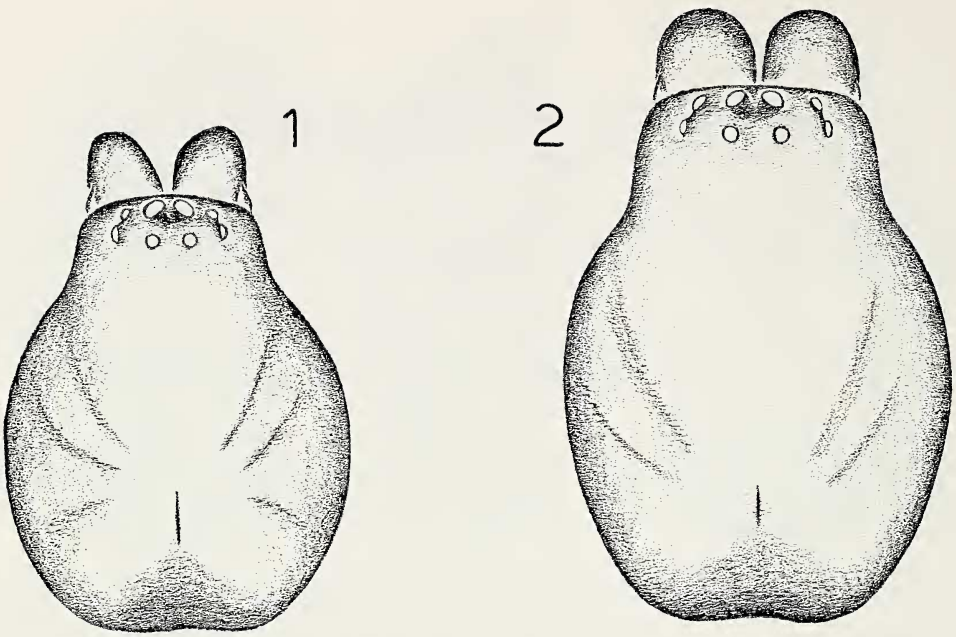
Examination of both sexes leads us to concur with Lehtinen on the placement of *Hebrithele* within the Miturgidae. We do not concur with his tentative placement of the genus in the subfamily Eutichurinae, however, as the thoracic groove is well demarcated (rather than reduced or absent) and the retrolateral margin of the cymbium has an incision, rather than the projection typical of eutichurines (see Bonaldo 1994). Both the incised cymbium and the widely separated anterior lateral spinnerets suggest a placement in the Miturginae, closer to the American genera *Teminius* Keyserling (see Platnick & Shadab 1989) and *Strotarchus* Simon (transferred from the Eutichurinae to the Miturginae by Bonaldo 1994), and the Australasian genus *Miturga* Thorell, rather than in the Eutichurinae.

All measurements are in millimeters.

Hebrithele Berland

Hebrithele Berland 1938: 137 (type species by original designation *Hebrithele longicauda* Berland).

Diagnosis.—The combined presence of an elongated distal segment on the posterior lateral spinnerets, widely separated anterior lateral spinnerets, a well-marked thoracic groove (Figs.



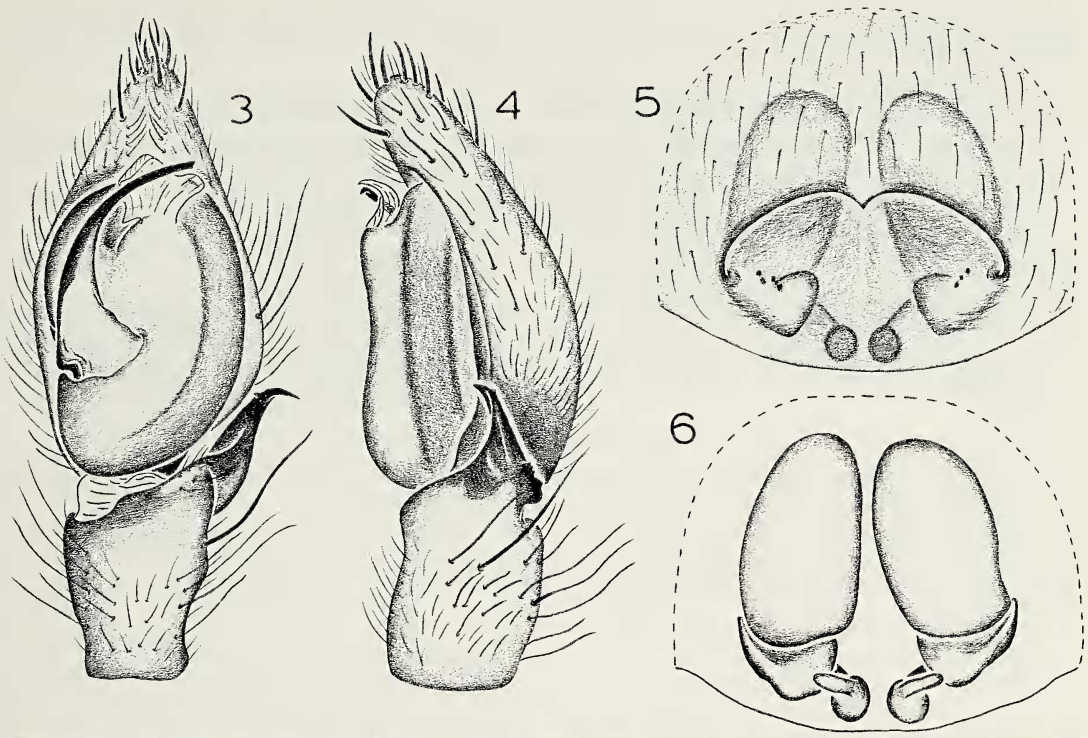
Figures 1, 2.—*Hebrithele insulana* (Rainbow), carapace, dorsal view. 1, male; 2, female.

1, 2), an incised cymbial margin (Fig. 4), a palpal bulb lacking a median apophysis, and large, ovoid spermathecae (Fig. 6) is diagnostic of the genus.

Description.—Araneomorph, ecribellate, entelegyne spiders. Carapace widest between coxae II and III, narrowed opposite palpal insertion, light brownish orange; cephalic area flattened, thoracic groove longitudinal, long, occupying over one-sixth of carapace length; ocular area and clypeus with numerous weak, white setae and several strong bristles. From above, anterior eye row recurved, posterior row procurved; from front, both rows procurved; all eyes circular, AME much larger than others; PME and PLE subequal, smaller than ALE; AME separated by less than their radius, by less than their radius from ALE; PME separated by about twice their diameter, by more than their diameter from PLE; ALE and PLE almost contiguous; MOQ about as wide in front as in back, wider than long; clypeal height slightly greater than AME diameter; chilum present as distinct triangular sclerite. Chelicerae usually with three promarginal teeth, median one largest, situated near tip of fang furrow; three smaller retromarginal teeth situated closer to base of fang, with tooth closest to fang smaller than others (or missing). Mouthparts and sternum light brown, darkest at base of labium and endites; endites distally squared in males (distal margin of female endites more rounded), without oblique depressions, with strong serrula, extending far beyond labium; labium only slightly longer than wide, invaginated at posterolateral corners; sternum shield-shaped, not rebordered, with sclerotized extensions to each coxa and between coxae I and II. Leg formula 4123; legs light brownish orange; tarsi with two dentate claws and conspicuous claw tufts; trochanters deeply notched; trichobothria present on tibiae, metatarsi, and tarsi. Abdomen brownish gray, coated with strong, dark setae; males without dorsal scutum; anterior lateral spinnerets elongated, separated at base by almost their diameter, with distinct distal segment bearing one major ampullate gland spigot and several piriform gland spigots not enlarged in either sex; posterior median spinnerets short, tubular in both sexes; posterior lateral spinnerets with two long segments; colulus represented by wide setose area of cuticle. Male palp with femur and patella unmodified; tibia with retrolaterally directed retrolateral apophysis; bulb with strong embolus and membranous conductor, without median apophysis. Epigynum wide, heavily sclerotized posteriorly.

Hebrithele insulana (Rainbow) new combination
(Figs. 1–6)

Leptodrassus insulanus Rainbow 1901: 523, pl. XXVIII, figs. 1, 1a (male holotype from Malekula Is., New



Figures 3–6.—*Hebrithele insulana* (Rainbow). 3, left male palp, ventral view; 4, same, retrolateral view; 5, epigynum, ventral view; 6, same, dorsal view.

Hebrides, should be in the Australian Museum, Sydney, lost).

Anzacia insulana: Dalmas 1919: 249.

Hebrithele longicauda Berland 1938: 137, figs. 21–25 (female holotype from Malekula Is., New Hebrides, in MNHN, examined). NEW SYNONYMY.

Hypodrassodes insulanus: Roewer 1955: 404.

Diagnosis.—The laterally directed retrolateral tibial apophysis of males (Fig. 3) and the arched anterior epigynal margin situated at only half the length of the spermathecae of females (Fig. 5) are presumably diagnostic.

Male.—Total length 7.60. Carapace 3.55 long, 2.75 wide. Eye diameters and interdistances: AME 0.25, ALE 0.15, PME 0.15, PLE 0.17; AME-AME 0.07, AME-ALE 0.05, PME-PME 0.25, PME-PLE 0.22, ALE-PLE 0.05; MOQ length 0.45, front width 0.55, back width 0.52. Chelicerae with three promarginal and three retromarginal teeth. Abdomen 4.05 long, 2.15 wide; posterior lateral spinneret proximal segment 0.75 long, distal segment 0.52 long. Leg measurements (femur, patella, tibia, metatarsus, tarsus, total): I 3.10, 1.50, 2.65, 2.50, 1.25, 11.00; II 2.80, 1.45, 2.30, 2.30, 1.15, 10.00; III 2.50, 1.25, 1.80, 2.25, 1.05, 8.85; IV 3.30, 1.40, 2.70, 3.20, 1.25, 11.85. Leg spination (only surfaces bearing spines listed): femora: I d1-1-1, p0-0-2, r0-0-1; II d1-1-1, p0-1-2, r1-1-1; III, IV d1-1-1, p1-1-1, r1-1-1-1; tibiae: I v2-2-1p; II v2-2-2; III, IV d1r-0-0, p1-1, v2-2-2, r1-1; metatarsi: I v2-1r-1r; II v2-2-0; III, IV p1-2-2, v2-2-2, r1-2-2. Retrolateral tibial apophysis with tiny, triangular cusp on medial margin near tip (Fig. 3); embolus strong, arched, supported by membranous conductor (Fig. 4).

Female.—Total length 7.90. Carapace 4.10 long, 3.05 wide. Eye diameters and interdistances: AME 0.22, ALE 0.20, PME 0.15, PLE 0.20; AME-AME 0.15, AME-ALE 0.07, PME-PME 0.32, PME-PLE 0.30, ALE-PLE 0.05; MOQ length 0.52, front width 0.60, back width 0.57. Chelicerae with two (right) or three (left) promarginal and three retromarginal teeth. Abdomen 4.00 long, 2.30 wide; posterior lateral spinneret proximal segment 0.80 long, distal segment 0.60 long. Leg measurements: I 3.20, 1.80, 2.75, metatarsi and tarsi missing; II 3.15, 1.65, 2.40, 2.25, 1.25, 10.70; III 2.80, 1.30, 1.85, 2.25, 0.95, 9.15; IV 3.50, 1.65, 2.85, 3.30, 1.25, 12.55. Leg

spination: femora: I, II d1-1-0; III d1-1-0, p1-1-1, r1-1-1-1; IV d1-1-1, p1-1-1, r1-1-1-1; tibiae: I v2-2-0; II v1p-1p-0; III, IV d1r-0-0, p1-1, v2-2-2, r1-1; metatarsi: I missing; II v2-0-0; III, IV p1-2-2, v2-2-2. r1-2-2. Anterior epigynal margin bipartite, arched (Fig. 5), spermathecae large, oval (Fig. 6).

Material examined.—**NEW HEBRIDES.** *Epi Island*: Lowekewou, Aug. 31, 1979, elev. 0–100 m (Barnes, Nishida, Gagné, Samuelson, BPBM), 1♂. *Malekula Island*: no specific locality, May 1934 (A. de la Ruë, MNHN), 1♀ (holotype).

Distribution.—Known only from the New Hebrides.

Synonymy.—The male and female differ slightly in endite shape, the relative width of the pars cephalica, and coloration; we attribute the first two differences to sexual dimorphism and the latter one to the holotype being a freshly molted specimen. Until additional species of the genus are found, these specimens are most parsimoniously considered conspecific.

ACKNOWLEDGMENTS

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LITERATURE CITED

Berland, L. 1938. Araignées des Nouvelles-Hébrides. Ann. Soc. Ent. France, 107:121–190.

Bonaldo, A. B. 1994. A subfamília Eutichurinae na região neotropical, com a revisão do gênero *Eutichurus* Simon, 1896 (Araneae, Miturgidae). Iheringia (Zool.), 76:101–159.

Dalmas, R. de. 1919. Catalogue des araignées du genre *Leptodrassus* (Gnaphosidae), d'après les matériaux de la collection E. Simon au Muséum National d'Histoire Naturelle. Bull. Mus. Natl. Hist. Nat., Paris, 1919:243–250.

Lehtinen, P. T. 1967. Classification of the cribellate spiders and some allied families, with notes on the evolution of the suborder Araneomorpha. Ann. Zool. Fennici, 4:199–468.

Platnick, N. I., & M. U. Shadab. 1989. A review of the spider genus *Teminius* (Araneae, Miturgidae). American Mus. Novit., 2963:1–12.

Rainbow, W. J. 1901. Arachnida from the South Seas. Proc. Linn. Soc. New South Wales, 26:521–532.

Roewer, C. F. 1955. Katalog der Araneae von 1758 bis 1940, bzw. 1954. Brussels, 2a–b: 1751 pp.

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